HQB
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Teacher Astronaut Tells Kids to Reach For Their Books, Then the Stars

Astronaut Barbara Morgan took a day off from her astronaut training last month to join NASA Administrator Sean O'Keefe and Deputy Secretary of Education William Hansen at Burrville Elementary School in Washington. They spoke to the students about the importance of education and believing in their abilities.

"Your parents and teachers will often urge or persuade you to try difficult activities and studies—(they will) ask you to work harder, and it is because they have confidence in you," Barbara Morgan said. "Their confidence in you should give you confidence in yourself."

Morgan asked the students what they would like to learn from research and explorations conducted in space. Their enthusiastic replies included: what space travel does to the human body; how other planets differ from the Earth; whether extraterrestrial life exists; and how the Earth's weather is affected by our solar system. She explained that the crewmembers of the International Space Station are working on some of those very questions.

Administrator O'Keefe explained how important it is for younger generations to study the fields of mathematics and engineering. He told the students about the International Space Station and why it will be exciting to have an educator in space. He also handed out the STS-111 crew patch to the students.

"As our Education Mission Specialist, Barbara Morgan will give NASA and the world a new perspective on the wonders of space research and exploration," Administrator O'Keefe said.

Deputy Secretary Hansen encouraged the students to read. "Education begins with reading, so stay in school and prepare for the important decisions you have ahead of you," he said.

Morgan discussed different aspects of her astronaut training. She displayed a variety of slides including the KC-135 or "vomit comet." The KC-135 flies in parabolas, upward at a 45-degree angle, then downward at a 45-degree angle. At the top of the parabola, people aboard the plane float much as they do in space. Astronauts use time aboard the plane to learn to control their motor skills in zero gravity.

Photo credit: NASA/Bill Ingalls

Morgan also told the students about the T-38, a small jet shuttle pilots use to keep their aviator skills fresh. The pilots fly the T-38s with members of their crew to help establish a working trust and relationship between the crewmembers.

"As our Education Mission Specialist, Barbara Morgan will give NASA and the world a new perspective . . ." Administrator O'Keefe said.

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***HQ Bulletin* Submission Deadline**
Articles must be submitted by close of business Tuesday, June 11, to be considered for the July 2002, edition of the *HQ Bulletin*. For the publication schedule, see *www.hq.nasa.gov/hq/infocom/bullsched.htm*

Ames Research Center
NASA Ames Research Center recently welcomed over 1,000 enthusiastic students and teachers to Aero Expo II. This was the second in a series of Ames-sponsored events that will lead up to the celebration of the Centennial of Flight in 2003. A diverse group of aspiring astronauts and pilots, masquerading as 5th- through 8th-grade students from 19 Bay Area schools, attended the event. The students listened to the stories and experiences of Cecilia Aragon, Wendy Holforty, and Mitzi Saylor, three female pilots with ties to Ames. Then, the group toured five of Ames' aeronautics facilities.

Dryden Flight Research Center
NASA's DC-8 is participating in a study of water vapor that feeds showers and thunderstorms. The aircraft is one of six taking samples during the International H_2O Project (IHOP 2002) from May 13 through June 30. The National Center for Atmospheric Research is leading the investigation of the moisture that produces heavy rains across the southern Great Plains from Texas to Kansas. Scientists hope the IHOP measurements will answer questions about when, where, and how summertime storms form and allow for better prediction of rainfall amounts associated with these storms.

Goddard Space Flight Center
The second annual Technology Education Alliance with Middle Schools (TEAMS) competition, hosted by Goddard Space Flight Center, included more than 300 students from 18 middle schools across Maryland. The competition, consisting of 34 teams, was designed to show middle school students how teamwork enhances people's ability to solve technology problems that could not be solved individually.

Glenn Research Center
In celebration of Earth Week 2002, hundreds of students across the country participated in a Webcast distance-learning program, "Observing Earth from Space." The Webcast had wonderful participation with more than 30 States registered, including Alaska and Hawaii. Puerto Rico and Canada also registered for this event.

Jet Propulsion Laboratory
More than 500 people attended an event at the National Air and Space Museum to honor NASA and the Jet Propulsion Laboratory for 40 years of planetary exploration. The tribute recognized JPL's legacy of exploring the planets and beyond. Among the attendees were Administrator O'Keefe, JPL Director Dr. Charles Elachi, California congressional representatives Adam Schiff and David Dreier, and David Baltimore, president of the California Institute of Technology, Pasadena, CA.

Johnson Space Center
Space Station crewmember Dan Bursch spoke with musician Jimmy Buffet "long distance" from the International Space Station. Video of Bursch from onboard the International Space Station was recently shown during Buffett's Houston-area concert. Buffett dedicated a song during the concert to Bursch, a longtime fan.

Kennedy Space Center
A Kennedy Space Center-sponsored team, No. 233, took the For Inspiration and Recognition of Science and Technology (FIRST) World Championship by storm, winning several honors, including tying for third. The FIRST robotics competition, featuring the top 290 of 650 teams across the world, was held at the Epcot Center in Orlando. Team No. 233's performance is particularly rewarding because the lab member who started and continued to drive the mentoring effort, Ron Fox, passed away in December.

Langley Research Center
NASA Langley Research Center's Office of Education is expanding the highly successful Kids Science News Network (KSNN) into Spanish to engage the youngest population group in the United States—Hispanic students. One-third of Hispanics are under 18 years of age and represent approximately 15 percent of the K–12 population.

Marshall Space Flight Center
The ninth Annual Great Moonbuggy Race was held at the U.S. Space & Rocket Center in Huntsville, AL. The competition was inspired by the actual lunar roving vehicle project during the 1960s and 1970s. The race challenges students to design and build a human-powered vehicle so they will learn how to deal with real-world engineering problems similar to those faced by the actual NASA lunar rover team. A team from Cornell University in Ithaca, NY, rode to victory in the college division, and a team from Lafayette County High School in Higginsville, MO, took top honors in the high school division.

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Removing the Barriers

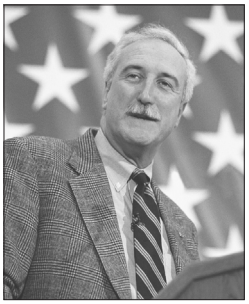


Photo credit: NASA/Renee Bouchard

I want to challenge all of our NASA colleagues to "break the rules." Examine your daily routines and business practices. Are you aware of outdated or ineffective activities within our Agency? If we can remember why a rule was instituted, and the rule gets in the way of good management, it's time to change the rule.

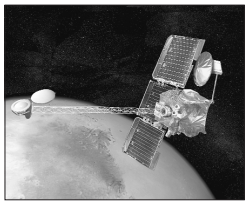
The President's "Freedom to Manage" initiative provides a mechanism for reforming management practices and capabilities of the Government.

"That is the way we've always done it" isn't a good enough answer. Some changes at NASA are already occurring. We are all professionals, and we should treat each other with the same level of respect, so we're trying to change policies that don't advance that professionalism. The time and attendance sheets are undergoing changes, and all of the NASA Centers will now accept any Center badge as valid for entrance.

We need to use our resources, both human capital and financial capital, properly and effectively. Please, contact your Center Directors and managers with your ideas for reform, and, if you feel like your idea is not getting the attention it deserves, send your comments to the F2M Web site: **f2m.nasa.gov**

Together, we will break down the barriers within our Agency and create an environment that is results oriented and performance based. One NASA.

Mars Odyssey Reveals Abundant Water Ice



Using instruments on NASA's 2001 Mars Odyssey spacecraft, surprised scientists have found enormous quantities of water ice under the surface of Mars—enough to fill Lake Michigan twice over. And that may just be the tip of the iceberg.

Scientists used Odyssey's gamma ray spectrometer instrument suite to detect hydrogen, which indicated the presence of water ice in the upper meter (3 feet) of soil in a large region surrounding the planet's south pole. The detection of hydrogen is based both on the intensity of gamma rays emitted by hydrogen and by the intensity of neutrons that are moderated by hydrogen. The neutron intensity was observed by the high-energy neutron detector and the neutron spectrometer. For additional information on Mars Odyssey, see **mars.jpl.nasa.gov/odyssey**

Gregory To Be Nominated as NASA Deputy Administrator

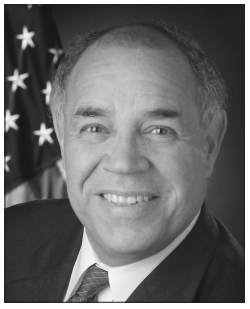


Photo credit: NASA/Bill Ingalls

President George W. Bush has announced his intention to nominate Frederick D. Gregory as the next Deputy Administrator for NASA. Gregory, 61, is a veteran astronaut and U.S. Air Force combat pilot, and currently serves as the Associate Administrator for Space Flight.

If confirmed as Deputy Administrator, Gregory will serve as the chief operating officer for the Agency and report directly to Administrator O'Keefe. He will be responsible for directing and managing many of the programs, as well as the day-to-day operations and activities at NASA.

Before being named to his current position in December 2001, Gregory served as Associate Administrator for Safety and Mission Assurance and was charged with the oversight of all safety issues within NASA. He developed, implemented, and managed quality assurance policies that dealt with reliability and maintainability.

As a NASA astronaut, Gregory logged more than 455 hours in space during three Space Shuttle missions. In 1985, he served as pilot onboard *Challenger* during STS-51B. Gregory was mission commander for STS-33 in 1989 and STS-44 in 1991.

Gregory was selected as an astronaut in 1978, after a distinguished career with the U.S. Air Force. He logged nearly 7,000 hours in 50 types of aircraft, including 550 combat missions over Vietnam. He retired as a Colonel in December 1993.

Dr. Edward J. Weiler

Photo credit: NASA/Bill Ingalls

Weiler

Title: Associate Administrator for Space Science
Describe your current position with NASA: Responsible for providing overall executive leadership of NASA's Space Science Enterprise. This Enterprise aims to achieve a comprehensive understanding of the origins and evolution of the solar system and the universe.
Career history: Some previous positions include: Chief Scientist for the Hubble Space Telescope (HQ 1979–1998), Science Director of the Astronomical Search for Origins and Planetary Systems theme within the Office of Space Science (HQ 1996–1998), and Chief of the Astronomy and Gravitational Physics branch (HQ 1980–1996).
Describe your family: I have two children, Allison, 16 and Gregory, 12. Allison plans to be a scientist, perhaps a physicist or chemist, and plays many sports. Gregory has no "plans" for his career at this point but does play many sports.
Activities: Water skiing and participating in the coaching for my son's and daughter's various sports teams. My only real hobby is homemade burglar alarms.

Edward Goldstein

Photo credit: NASA/Renee Bouchard

Goldstein

Title: Writer/Editor, Office of Public Affairs
Describe your current position with NASA: Help write speeches for Administrator O'Keefe and opinion/editorial pieces reflecting NASA's position on key program issues.
Career history: Some previous positions include: Rockwell International, Space Systems Division, 1981–1989; Government Relations on the Space Shuttle and Space Station programs; and the White House, Office of Domestic and Economic Policy, 1990–1993.
Describe your family: I'm single. Parents live in Denver. Two sisters: one in Denver and one in Omaha.
What are your hobbies outside the office? Sports and nature photography, and playing softball and ice hockey.

Future Faces of NASA

Photo credit: NASA/Bill Ingalls

NASA HQ summer interns (l to r): Rachel Levine, Parthena Kydes, Ashley Blacktree, and Erica Rountree.

Summer internships provide NASA's future employees with a unique opportunity to work alongside people who manage the day-to-day business of our Nation's space program. Meet the first of more than 40 interns scheduled to work in Headquarters offices this summer.

Rachel Levine of Arlington, VA, is a junior at George Mason University, Fairfax, VA, majoring in electrical engineering. Rachel, who is working in the Office of Space Flight, chose to intern at Headquarters, for the "good work experience and the opportunity to see how engineering is applied in real-life situations."

Parthena Kydes of Arlington, VA, is a senior at Mary Washington College, Fredericksburg, VA, majoring in business administration. Parthena is assigned to the Office of Safety and Mission Assurance. She wanted to work at NASA "to obtain experience in a Government setting, to help decide a career path, and because NASA has always interested me."

Ashley Blacktree of Upper Marlboro, MD, is a sophomore at Winston-Salem State University, Winston-Salem, NC, majoring in molecular biology. Ashley, who is assigned to the Office of External Relations, considers working at HQ a great opportunity.

Erica Rountree of Bowie, MD, is a junior at George Mason University, Fairfax, VA, majoring in art. Erica, an intern in the Office of Space Science, wanted to work at NASA to get experience working for the Federal Government.

Administrator Asks Employees To Identify Impediments

The President's Management Agenda states that a principal goal of this Administration is to remove barriers to more efficient management, with the expectation of improved accountability and performance.

Following the President's agenda, NASA Administrator Sean O'Keefe appointed a Freedom to Manage (F2M) Task Force to solicit input from the NASA workforce. As impediments are identified, the F2M Task Force screens and assigns the appropriate action within the Agency. The Task Force, chaired by Chief of Staff Courtney Stadd, sets aggressive deadlines for the development of action plans, emphasizes closeout, and provides feedback to the initiating party.

The Agency has implemented changes that range from the elimination of restrictions on travel to the delegation of significant human resource authorities to the Centers. In addition, NASA simplified the time and attendance process by eliminating the timekeeper function, and implemented a new policy that no longer requires civil servants to be badged as visitors when traveling to a different Center.

Photo credit: NASA/Bill Ingalls

Courtney Stadd, Chair of the F2M Taskforce, presents awards to NASA employees John Pennington and Joanne Mueller to recognize them for taking the initiative to identify and then implement an F2M initiative.

To learn more about F2M, find your point of contact. To submit your ideas regarding existing barriers to efficiency and effectiveness, visit the Web site at **f2m.nasa.gov**

freedom2manage

NASA Sponsors TGIR Conference and Awards

The NASA Aerospace Technology Enterprise's Turning Goals Into Reality (TGIR) Conference was held in conjunction with AIAA's X-Vehicles Symposium in Santa Clara, CA, May 21–23.

In keeping with the Conference theme "The Future of Flight," the Enterprise reported on organizational refinements, managing change and goals, and research directions and investments. Speakers included Enterprise Associate Administrator Sam Venneri; and Executive Vice President, GRA, Richard Golaszewski.

During the Conference's 2002 TGIR Awards Ceremony on May 23, NASA recognized the achievements of 15 Government and industry teams, including the following winners of the Administrator's Award and Goal 1–4 Awards:

Administrator's Award, ERAST Helios Prototype Solar-Electric Sensor Team

Goal 1: Revolutionize Aviation, The AGATE Alliance Project Team

Goal 2: Advance Space Transportation, Shuttle RSRM Thermal Barrier Development Team

Goal 3: Pioneering Technology, SLI: Advanced Engineering Environment (AEE)/Advanced Design Technologies Testbed (ADTT) Team

Goal 4: Commercialize Technology, Smart Surgical Probe Team

Ten additional teams received Objective Awards for Aviation Safety, Emissions Reduction, Noise Reduction, Increase Capacity, Mobility, Mission Safety, Mission Affordability, Mission Research, Engineering Innovation, and Technology Innovation.

Employee Receives Congressional Recognition

(l to r) Barbara Kreykenbohm with Mary Kicza, Associate Administrator for OBPR.

Representative Bart Gordon of Tennessee, Ranking Member of the House Space and Aeronautics Subcommittee, recognized Barbara Kreykenbohm of the Office of Biological and Physical Research (OBPR) in the *Congressional Record* on April 23, for her dedicated service while a NASA Fellow on his staff.

In concluding his tribute, Gordon said, "Although my staff and I are sad to see her leave, Barbara's dedication to science and man's quest for discovery will continue to serve NASA and the American people well."

Kreykenbohm began her career at Marshall Space Flight Center in 1975 and moved to Headquarters in 1984 with the original Space Station Task Force. She is currently a Special Assistant to the Director, OBPR Research Integration Division, on special assignment with the ISS Utilization Management Concept Development Team.

Secretarial/Clerical Awards

Meet the winners of the 19th Annual Secretarial/Clerical Awards (l to r): Carolyn Saldana, Code AA; Top Winner Judy Gross, Code Y; Annette Huffman, Code W; Doreen Simms, Code AS; Linda Phillips, Code P; Lena Bodwin, Code X; Precittia Ball, Code R; and Theresia Wijdoogen, Code Q. The Top Winner received $1,000; the seven other winners received $700.

Photo credit: NASA/Renee Bouchard

IFM's PDM Initiative Is Coming Soon

Position Description Management (PDM) is almost here! This Integrated Financial Management (IFM) project will be implemented at NASA HQ the week of July 1. The expected "go live" date for the transition to the new system is July 9. NASA HQ supervisors, managers, and team leads are invited to a PDM preview June 4 and 5 in the auditorium. Watch *Heads Up* for times.

The Position Description Management (PDM) system automates the current position description (PD) writing and editing process. It also enables supervisors, managers, and human resources staff to create new positions easily and speedily, and streamlines the classification process.

For more information, contact the NASA HQ Functional Lead for PDM, Linda Pultz, 202-358-1568, **lpultz@mail.hq.nasa.gov** or visit the Web site at **npdm.nasa.gov** For information about the many other projects managed by the IFM Program Office, visit **www.ifmp.nasa.gov**

Bradley Named NASA Chief Engineer

Administrator Sean O'Keefe has named Theron M. Bradley, Jr., as NASA's Chief Engineer, responsible for the overall review and technical readiness of all NASA programs.

Bradley, 55, is a former nuclear engineer for the U.S. Navy, serving in the Naval Nuclear Propulsion Program. He has also served as a civilian with the U.S. Department of Energy and the Department of Defense in numerous leadership and management positions with the Office of Naval Reactors, both in Washington and in the Idaho branch.

Reporting directly to the Administrator, Bradley will ensure development efforts and mission operations are being planned and conducted on a sound engineering basis, and will provide an integrated focus for Agencywide engineering policies, standards, and practices.

During his Navy career, Bradley served as Director, Submarine Systems, for the Trident submarine program and was instrumental in the initial design of the nuclear propulsion plant for Nimitz class aircraft carriers and the advanced reactor design for Los Angeles class submarines.

Since 1982, he has served the Director of Naval Nuclear Propulsion as a field representative and manager of the branch office in Idaho, in charge of nuclear operations.

Bradley will join NASA on June 15.

Take Our Daughters to Work Day

The 175 kids who attended Take Our Daughters to Work Day this year at Headquarters had a new friend to meet, a real moving and talking robot. This and many other "spacey" workshops highlighted their day, along with meeting a real, live female astronaut, Susan Kilrain and Roger Crouch, International Space Station Senior Scientist, a two-time Payload Specialist. (Crouch is shown in the background).

Two Webby Nominations for NASA

The International Academy of Digital Arts and Sciences nominated two NASA Web sites for the 2002 Webby Awards, the leading international honor for achievement in technology and creativity. Sites are judged on their content, structure, navigation, visual design, functionality, interactivity, and overall experience. The NASA Home Page (**www.nasa.gov**) is nominated in the "Government + Law" category, and the Earth Observatory (**earthobservatory.nasa.gov**) is nominated in the "Science" category. You can decide the most outstanding site in each category by registering to vote in this year's People's Voice Awards. Two other NASA sites have won Webbies: Science@NASA in 1999 and the Mars Exploration page in 1998.

NASA TV Nominated for Two Emmys

The National Academy of Television Arts and Sciences, Washington Chapter, honored NASA Television with two Emmy nominations. Mark Hailey received a nomination for a composite that included opening video for the NASA Video File, Education Gallery, and NASA Gallery. Karl Bennett received a nomination in the editing category. Bennett's pieces included NASA's 2001 Space Odyssey and the 100th Space Shuttle Mission Music Video. The award ceremony is scheduled for June 15, 2002, at the Reagan Building.

Around the Centers

Continued from page 2

Stennis Space Center
NASA's Stennis Space Center and the Rocketdyne Propulsion & Power team of the Boeing Company are celebrating a significant step toward safer on-orbit operations of space vehicles with the recent completion of the successful testing of alternative rocket propellants. Stennis conducted 249 tests in a 26-day period on the Boeing/Rocketdyne Advanced Hydrogen Peroxide Catalyst Bed, opening the door for testing of a 98-percent hydrogen peroxide/kerosene torch igniter. Researchers believe the testing could lead to the use of this less-toxic alternative for storable upper-stage rocket propulsion.

obituary

Mary Lou Cowley, a retired NASA Headquarters employee who lived in Key West, FL, died March 29 after a brief illness.

Mary Lou was a graduate of Bethany College in West Virginia. She started her long Government career at the U.S. Naval Headquarters, and then took a position at NASA Headquarters where she worked in graphics until retiring from the Office of Headquarters Operations in 1990.

Mary Lou will be remembered for her strength and spirit by her family and many friends. She is survived by her sister Doris C. Forsyth and brother-in-law Emmett Forsyth.

Remembrances in her name can be made to Bethany College, the American Heart Association, or the American Cancer Society.

Events Calendar

June 6—NASA HQ Health Fair

June 10—Annular Solar Eclipse, Visible from Mexico and North America

June 11–12—NASA Advisory Council (NAC) Meeting, NASA Headquarters

June 12—35th Anniversary (1967), Venera 4 Launch (Soviet Venus Lander)

June 14—35th Anniversary (1967), Mariner 5 Launch (U.S. Venus Flyby Mission)

June 14–15—32nd Annual Apollo Rendezvous and Telescope Fair, Dayton, OH

June 14—Flag Day, Flags for Heroes Ceremony, New York City

June 15—NASA Picnic, GSFC Recreation Center

June 24—NOAA-M Titan 2 Launch

June 26—NASA HQ Blood Drive

June 27—5th Anniversary (1997), NEAR, Asteroid Mathilde Flyby

June 30—Mandatory FY02 IT Security Training Deadline

July 1—CONTOUR Launch (Physics Satellite)

Exchange Council News

http://www.hq.nasa.gov/exchange/

Summer Fun with the Exchange Council!

HQ-GSFC NASA Picnic: Saturday, June 15, 12 noon–4 p.m., GSFC Recreation Center. Tickets on sale through June 12.
NASA Day at King's Dominion: Saturday, July 27. Tickets should be available in July.
NASA Day at Six Flags: Sunday, August 18.
Annual Crab Feast: Thursday, August 29.